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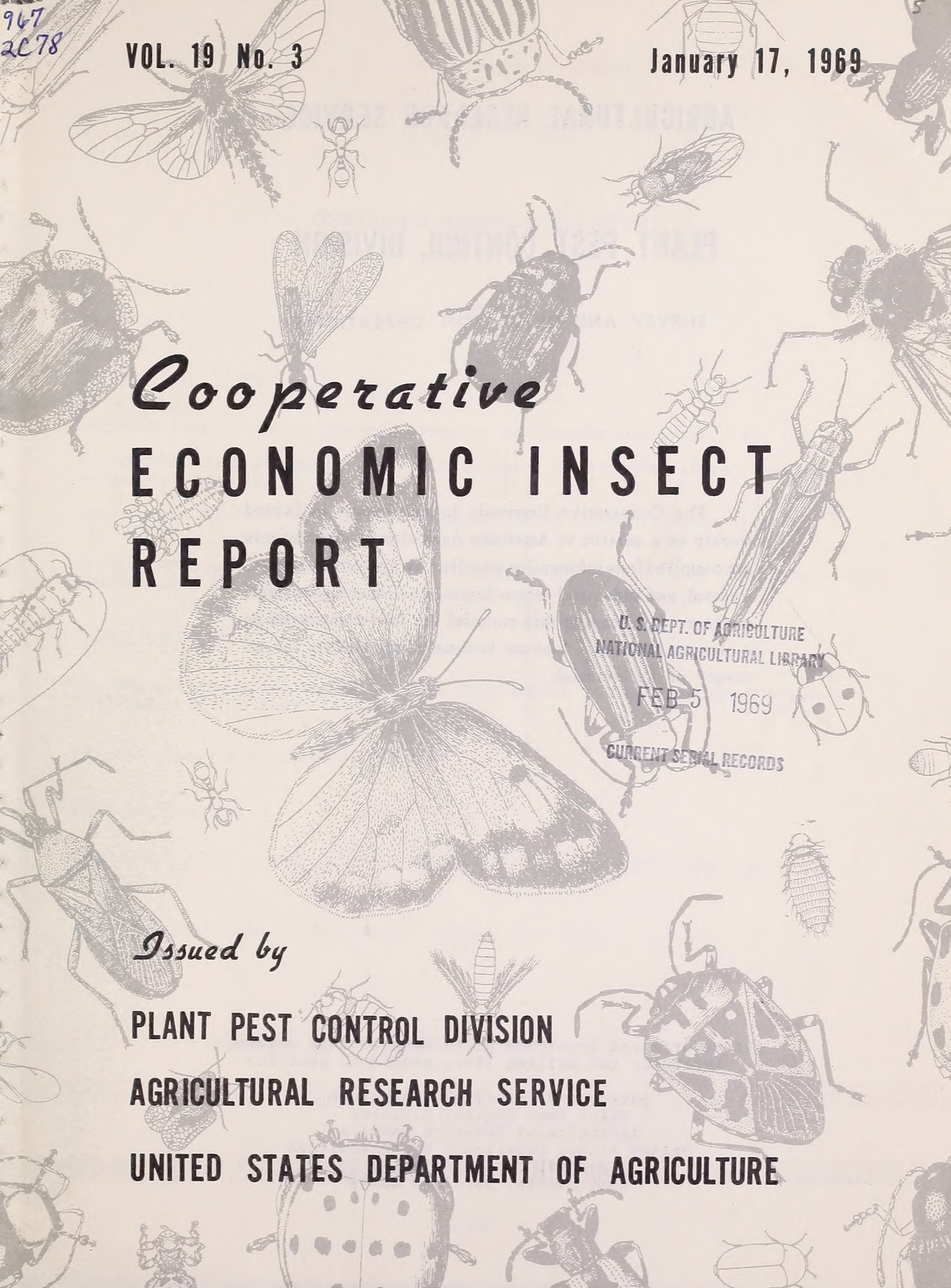

Cooperative
ECONOMIC INSECT REPORT

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PLANT PEST CONTROL DIVISION
AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

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Survey and Detection Operations
Plant Pest Control Division
Agricultural Research Service
United States Department of Agriculture
Federal Center Building
Hyattsville, Maryland 20782

Volume 19 January 17, 1969 Number 3

COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

GREENBUG threatening in several areas of New Mexico and Texas. (p. 31).

An ARMORED SCALE at highest level in 18 years on Florida citrus; increase expected. (p. 32).

Damage of a PHYCITID MOTH heavy on magnolias in Conecuh County, Alabama. (p. 32).

CATTLE GRUBS problem at packing plants in southwestern Kansas and in cattle in southwestern Oklahoma. (p. 33).

Detection

New State records include RED-CLOVER SEED WEEVIL in Missouri (p. 31) and a PLATYPEZID FLY in South Carolina (p. 33).

For new county record see page 34.

Special Reports

Techniques to Determine Losses. Selected References 1967-1968. Part III. (pp. 35-37).

Distribution of Clover Seed Weevil (map). (p. 38).

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WEATHER OF THE WEEK ENDING JANUARY 13

HIGHLIGHTS: Last week was snowy and blustery over the North, warm in the West, cold in the East, and dry in the Southwest and south-central areas.

PRECIPITATION: Daily rains continued along the Washington and Oregon coasts with heavy snow in the Cascades, northern Sierras, and eastward to the northern Rocky Mountains. Precipitation totals ranged from 6 to 10 inches along the coast and on the western slope of the Cascades. Ten to 25 inches of snow fell in the Cascades on some days and by the end of the week had accumulated to 130 inches at 3,000 feet and to 200 inches at 5,500 feet. These depths are near, and in some instances exceed, the greatest depths of record for this time of year. Heavy snow fell in the Great Lakes region and in the Northeast. The snow drifted badly during the blizzard on Wednesday and Thursday closing most rural roads and schools in about 200 localities in Minnesota. Snow depths in Wisconsin ranged from about 10 inches in the south to 50 inches in the north. Upper Michigan also lay under about 50 inches of snow. Snow also clogged rural roads in Indiana. Many schools closed because of glazed roads. Snow fell almost daily in New York totaling 7 to 15 inches in the lee of Lake Erie on the 7th and 8th and parts of northern New England received a foot or more of snow during the week. Sleet, freezing rain or freezing drizzle iced roads, highways, airport runways, and sidewalks. Even walking became dangerous. Light rains fell about midweek in the Southeast. Wide areas from southern California to the Mississippi River received no rain or only light sprinkles during the week.

TEMPERATURE: Most of the area from the Cascades and Sierras to the Continental Divide in the north and the western Great Plains in the central and south averaged above normal. The Missouri and Mississippi Valleys and eastward to the Atlantic Ocean averaged much colder than normal due to blustery northerly winds most of the week. Southerly winds brought warm air to Texas on Wednesday but a norther on Thursday dropped the temperature abruptly -- in some places more than 50 degrees from Wednesday afternoon to Thursday morning. In parts of the East, this was the third very cold week. (Summary supplied by Environmental Data Service ESSA.)

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

CORN LEAF APHID (*Rhopalosiphum maidis*) - ARIZONA - Alates light in most barley in the Salt River Valley, Maricopa County. (Ariz. Coop. Sur.).

GREENBUG (*Schizaphis graminum*) - NEW MEXICO - As high as 100+ per foot on barley near Roswell, Chaves County. (Mathews). TEXAS - Very light on wheat in panhandle area near Hereford, Deaf Smith County. Damage light in Archer, Cottle, King, Foard, and Wilbarger Counties; moderate in Stonewall, Hall, and Knox Counties; and heavy in Dickens and Motley Counties. (Holt, Boring). Survey conducted on wheat January 7-9 in 15 panhandle counties. Maximum counts per row foot: 1,000-1,500 in Briscoe, Hall, and Motley; 100-200 in Floyd, Hale, Deaf Smith, Swisher, and Castro; 10-40 in Potter, Hutchinson, Hansford, Moore, Oldham, Randall, and Parmer. Wheat generally good. Above counts in nongrazed fields. Counts, 10 or less per row foot in grazed fields. Under control in Briscoe, Hall, and Motley Counties. (Daniels). OKLAHOMA - Continues very light to absent in Texas County. (Okla. Coop. Sur.). KANSAS - None on wheat in Finney, Gray, Ford, Edwards, and Stafford Counties. (Simpson). ARKANSAS - Survey negative on farm at Fayetteville, Washington County. (Boyer).

FORAGE LEGUMES

RED-CLOVER SEED WEEVIL (*Tychius stephensi*) - MISSOURI - Adults swept from red clover at Weldon Springs, St. Charles County. Collected by R.E. Munson and L.R. Hanning August 8, 1967. Determined by R.E. Warner. This is a new State record. (Munson).

PEA APHID (*Acyrthosiphon pisum*) - ARIZONA - Averaged 900 per 100 sweeps of alfalfa at Yuma, Yuma County. (Ariz. Coop. Sur.). ARKANSAS - Very low in northwest area. Up to 2 per square foot on vetch in farm at Fayetteville, Washington County. (Boyer).

BEET ARMYWORM (*Spodoptera exigua*) - ARIZONA - Up to 50 per 100 sweeps on alfalfa at Yuma, Yuma County. (Ariz. Coop. Sur.).

LYGUS BUGS (*Lygus* spp.) - ARIZONA - As many as 80 adults per 100 sweeps on alfalfa at Yuma, Yuma County. (Ariz. Coop. Sur.).

THREE-CORNERED ALFALFA HOPPER (*Spissistilus festinus*) - ARIZONA - Continues moderate on alfalfa at Yuma, Yuma County. (Ariz. Coop. Sur.).

GENERAL VEGETABLES

APHIDS - ARIZONA - *Acyrthosiphon scariolae* light near lettuce stems under wrapper leaves at Yuma, Yuma County; lettuce fields there being treated for *Myzus persicae* (green peach aphid). *M. persicae* heavy on mature carrots north of Glendale, Maricopa County. (Ariz. Coop. Sur.).

DECIDUOUS FRUITS AND NUTS

ARMORED SCALES - ALABAMA - Three commercial peach orchards of about 35 acres inspected in Geneva County. No *Aspidiotus perniciosus* (San Jose scale) found; intensive care and protection effective. Many signs of *Pseudaulacaspis pentagona* (white peach scale) damage in one orchard; infestation light but constantly threatening in this 11-acre orchard. *P. pentagona* infestation and damage increased in poorly kept and poorly protected trees and orchards in this area. (Bagby et al.).

PEACH TREE BORER (*Sanninoidea exitiosa*) - ALABAMA - Overwintering larvae of this and *Synanthedon pictipes* (lesser peach tree borer) light in 3 commercial peach orchards in Geneva County. Constant control efforts kept infestation manageable. More serious infestation of *S. exitiosa* observed at and below ground line in orchard of one and 2-year-old trees. (Bagby et al.).

CITRUS

Citrus Insect Situation in Florida - End of December - CITRUS RUST MITE (*Phyllocoptruta oleivora*) infested 56 (norm 62) percent of groves; 43 (norm 44) percent economic. Population dropped to moderate range and is slightly below average for yearend. Further decrease expected. Infestation on leaves similar to that on fruit. Highest districts south, west, and east. Will be heavy in 20 percent of groves if not treated promptly. TEXAS CITRUS MITE (*Eutetranychus banksi*) infested 26 (norm 40) percent of groves; 8 (norm 14) percent economic. Below normal and in low range. Slight increase expected but very few groves will have important infestations. Highest districts central and east. CITRUS RED MITE (*Panonychus citri*) infested 25 (norm 36) percent of groves; 3 (norm 14) percent economic. In low range and at lowest December level in 18 years of record. Slight increase expected. Highest districts west and east. GLOVER SCALE (*Lepidosaphes gloverii*) infested 51 (norm 73) percent of groves; 2 (norm 14) percent economic. Below normal and in low range with little change expected. Highest district west. PURPLE SCALE (*L. beckii*) infested 49 (norm 72) percent of groves; less than 1 (norm 7) percent economic. At lowest December level in 18 years of record. CHAFF SCALE (*Parlatoria pergandii*) infested 42 (norm 54) percent of groves; less than 1 (norm 7) percent economic. Will remain much below normal. YELLOW SCALE (*Aonidiella citrina*) infested 53 (norm 64) percent of groves; 2 (norm 13) percent economic. Lowest for December since 1964; most infestations very light. Slight increase expected. Districts uniformly infested, the highest being west. BLACK SCALE (*Saissetia oleae*) infested 36 (norm 36) percent of groves; 11 (norm 16) percent economic. Population near average, low and spotty with little change expected. Highest districts east and central. An ARMORED SCALE (*Unaspis citri*) infested 15 percent of groves; moderate or heavy in 7 percent. At highest level in 18 years of record. Increase expected. Infestations very spotty. WHITEFLIES infested 51 percent of groves; 12 percent moderate to heavy. In low range and slightly below normal. Little change expected. (W.A. Simanton (Citrus Expt. Sta., Lake Alfred)).

FOREST AND SHADE TREES

A CONIFER APHID (*Cinara occidentalis*) - OREGON - Found December 18 infesting block of grand fir in Christmas tree planting at West Salem, Polk County. Identified by T. Kono. (Larson, Westcott).

PHYCITID MOTHS (*Euzophera* spp.) - ALABAMA - *E. magnolialis* larval damage heavy on southern magnolia trees in 40-acre magnolia tree farm at Evergreen, Conecuh County. Determined by D.M. Weisman. (Huggins et al.). MARYLAND - *E. ostricolorella* lightly infested yellow-poplar near Wheaton, Montgomery County. Found by C.W. McComb May 12, 1967. Determined by D.M. Weisman. (U. Md., Ent. Dept.).

AN ERIOPHYID MITE (*Aceria nyssae*) - MARYLAND - Light populations rolled leaf edges on sweetgum planting near Lexington Park, St. Marys County, September 2. (U. Md., Ent. Dept.).

MAN AND ANIMALS

CATTLE GRUBS (*Hypoderma* spp.) - KANSAS - Problem continues at packing plants in southwest area. Infested up to 50 percent of animals slaughtered. (Simpson). OKLAHOMA - *H. lineatum* (common cattle grub) heavy in Cotton County cattle. Seven grubs in milk cow checked in Payne County. (Okla. Coop. Sur.).

SCREW-WORM (*Cochliomyia hominivorax*) - Total of 2 cases reported in U.S. January 5-11 as follows: TEXAS - Medina 2. Total of 127 cases reported in portion of Barrier Zone in Republic of Mexico December 30, 1968, to January 3, 1969, as follows: Baja California 2, Territorio sur de Baja California 34, Sonora 51, Chihuahua 2, Coahuila 9, Nuevo Leon 13, Tamaulipas 16. Total of 13 cases reported in Mexico south of Barrier Zone. Barrier Zone is area where eradication operation underway to prevent establishment of self-sustaining population in U.S. Sterile screw-worm flies released: Texas 26,368,000; Mexico 40,400,000. (Anim. Health Div.).

A PLATYPEZID FLY (*Microsania imperfecta*) - SOUTH CAROLINA - In smoke from sawmill at West Union, Oconee County. Collected by T.R. Adkins October 4, 1968. Determined by W.W. Wirth. Annoyance similar to gnats. Mostly males in smoke. This is a new State record. (Nettles).

HARD-BACKED TICKS - TEXAS - *Dermacentor* sp. widespread and heavy on cattle and horses in Mason County; most ranchers spraying or dusting. (Garrett). OKLAHOMA - *D. albipictus* (winter tick) and *Ixodes scapularis* (black-legged tick) light on cattle and deer checked in Cherokee County. (Okla. Coop. Sur.).

CATTLE LICE - MISSISSIPPI - Light on herd of about 50 dairy cows in Oktibbeha County. (Dinkins, Jan. 3). OKLAHOMA - Mostly *Haematopinus eurysternus* (short-nosed cattle louse) ranged moderate to heavy on dairy and beef cattle in Texas County and on Washita County beef cattle. Moderate on Cherokee County beef cattle. (Okla. Coop. Sur.). IOWA - *H. eurysternus* occasionally on 34 head of cattle checked for external parasites in Polk County. (Iowa Ins. Sur.).

STORED PRODUCTS

POTATO TUBERWORM (*Phthorimaea operculella*) - MICHIGAN - Winter problem in stored potatoes in Monroe and Bay Counties. Much of infested table stock sold. Presents problem of possible field infestation from seed stock in Bay County. (Janes).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

IMPORTED FIRE ANT (*Solenopsis saevissima richteri*) - TEXAS - Light in pasture at Center, Shelby County. Collected by H.J. Henderson December 30, 1968. Determined by D.R. Smith. This is a new county record. (PPC).

PINK BOLLWORM (*Pectinophora gossypiella*) - NEW MEXICO - Thirteen larvae from 101 cotton bales on lint cleaners of 7 southwest area gins. (Hare). Viability of larvae in cotton trash and stalks in soil ranged 35-50 percent in southern Eddy County. (Campbell, Mathews).

HAWAII INSECT REPORT

Turf - A BILLBUG (*Sphenophorus venatus vestitus*) heavy, averaged 16 adults per square foot; damage moderate to heavy on Tifgreen lawns at Hilo, Hawaii Island. (Yoshioka).

Fruits and Nuts - COCONUT SCALE (*Aspidiotus destructor*) increasing on coconut at Koko Head, Oahu. Infested more trees; yellowed leaves conspicuous. (Nakao). CLOUDY-WINGED WHITEFLY (*Dialeurodes citrifolii*) and GREEN SCALE (*Coccus viridis*) heavy on citrus trees, unsightly buildup of sooty mold at Hilo and Puna areas on Hawaii Island. Over 100 whiteflies per leaf at Hilo. (Yoshioka). RED-BANDED THRIPS (*Selenothrips rubrocinctus*) heavy, damage moderate to young foliage of many backyard mango trees at Paia, Maui. (Miyahira).

Ornamentals - WESTERN FLOWER THRIPS (*Frankliniella occidentalis*) light to medium on commercial rose and chrysanthemum blossoms at Koko Head, Oahu. Petal injury evident on chrysanthemum. Nymphs and adults of a LEAFHOPPER (*Protalebrella brasiliensis*) moderate to heavy on wedelia in scattered areas of Oahu. Counts per 10 sweeps: 350 at Waianae, 400 at Kaneohe, 100 at Koko Head, 250 in airport area of Honolulu. (Funasaki).

Shade Trees - BARNACLE SCALE (*Ceroplastes cirripediformis*) reappearing on fiddlewood trees along Lunalilo Home Road at Koko Head, Oahu; infestations light and confined to young branches. (Nakao).

Man and Animals - MOSQUITOES - Collected 2,037 *Aedes vexans nocturnus* and 13,649 *Culex pipiens quinquefasciatus* in 52 light traps on Oahu in December. *Aedes* catches highest at Kailua. *Culex* high at Waianae, Nanakuli, Kaneohe, and Kailua. (Mosq. Cont. Br., Dept. of Health).

Miscellaneous Insects - TOBACCO BUDWORM (*Heliothis virescens*) larvae moderate; feeding on foliage of tagua passionflower (*Passiflora foetida*) on Sand Island, Oahu. (Funasaki).

INSECT DETECTION

New State Records

RED-CLOVER SEED WEEVIL (*Tychius stephensi*) - MISSOURI - On red clover at Weldon Springs, St. Charles County. Collected by R.E. Munson and L.R. Hanning August 8, 1967. Determined by R.E. Warner. (p. 31).

A PLATYPEZID FLY (*Microsania imperfecta*) - SOUTH CAROLINA - In smoke from sawmill at West Union, Oconee County. Collected by T.R. Adkins October 4, 1968. Determined by W.W. Wirth. (p. 33).

New County Record

IMPORTED FIRE ANT (*Solenopsis saevissima richteri*) - TEXAS - Shelby County. (p. 33).

LIGHT TRAP COLLECTIONS

FLORIDA - Gainesville - 1/3-9, BL - Black cutworm (*Agrotis ipsilon*) 1, granulate cutworm (*Feltia subterranea*) 2, yellow-striped armyworm (*Prodenia ornithogalli*) 1.
TEXAS - Brownsville - 1/4-10, 2BL, 33-81°F., precip. 0.01 - Armyworm (*Pseudaletia unipuncta*) 2, black cutworm 2, variegated cutworm (*Peridroma saucia*) 3, yellow-striped armyworm 5.

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Part III

Additional copies of Parts I through III of this bibliography are available from Survey and Detection Operations.

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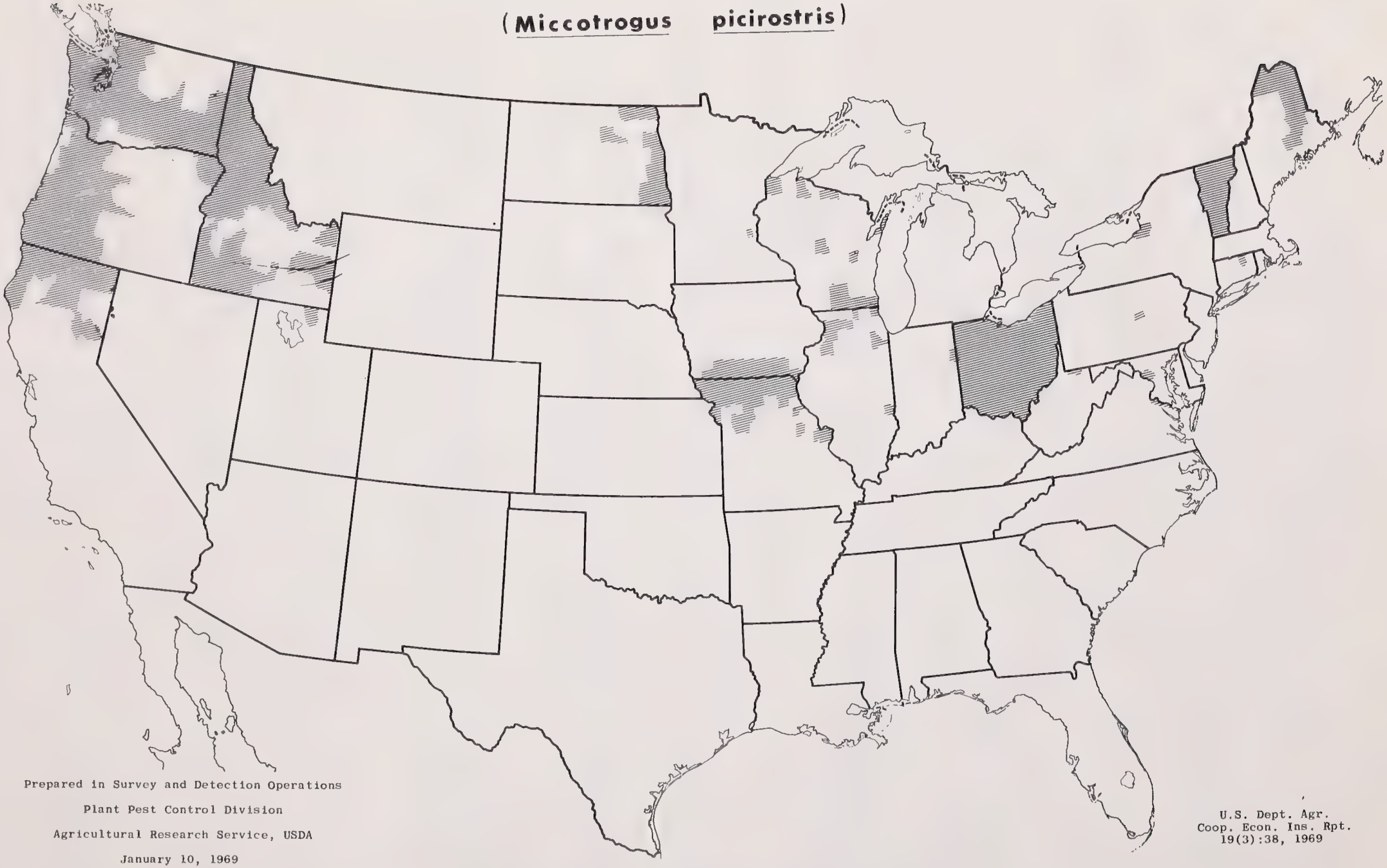
Distribution of Clover Seed Weevil

(*Miccotrogus picirostris*)



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